

Recovery Plan Action Status

Plan Name: South Florida Multi-Species Recovery Plan (68 spp.)

Plan Status: Final

Plan Date: 18-May-99

Lead Agency: USFWS

Lead Office: South Florida Ecological Services Field Office

(562-3909)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Key tree cactus (Pilosocereus robinii)	3	piro-h1.1.1	Continue Federal acquisition efforts.	Ongoing Current	FY 1995 - FY 1999		To be determined	Acquisition: General	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-h1.1.2	Support State acquisition efforts.	Ongoing Current	FY 1995 - FY 1999		Florida Fish and Wildlife Conservation Commission	Acquisition: General	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWC
Key tree cactus (Pilosocereus robinii)	3	piro-h1.1.3	Support and encourage land acquisition by non-governmental agencies.	Ongoing Current	FY 1995 - FY 1999		Non-governmental organizations	Acquisition: General	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): NGO
Key tree cactus (Pilosocereus robinii)	2	piro-h1.2.1	Prevent detrimental land-use changes within hardwood hammocks.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, South Florida counties	Acquisition: General	Labor type not yet selected	Task currently implemented on public lands and cost is included in responsible agency's budget. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-h1.2.2	Prevent land clearing.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, South Florida counties	Acquisition: General	Labor type not yet selected	Task currently implemented on public lands and cost is included in responsible agency's budget. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-h1.2.3	Prevent disturbance of surface mining.	Obsolete			U.S. Army Corps of Engineers, Florida Department of Environmental Protection, Private industry, landowners, etc.	Work type not yet selected	Labor type not yet selected	Not a documented problem. Task is currently conducted and cost is included in responsible agency's budget. Action lead(s): FWS

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Key tree cactus (Pilosocereus robinii)	3	piro-h1.2.4	Prevent subsurface saltwater intrusion.	Not Started			U.S. Army Corps of Engineers, Florida Department of Environmental Protection, Non-governmental organizations	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Not a documented problem. Task is currently conducted by prohibiting blasting of channels and cost is included in responsible agency's budget. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-h1.2.5	Fence or barricade areas.	Not Started			Florida Department of Environmental Protection	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Completed on public lands, recommend acquisition of remaining parcels for access control. Action lead(s): Not a documented problem. Task is currently conducted by prohibiting blasting of channels and cost is included in responsible agency's budget. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-h1.2.6	Remove invasive exotic vegetation.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, South Florida counties	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 3.0/acre); Total cost dependent upon number of acres infested with exotics. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-h2.1	Eliminate physical degradation of habitat and restore to optimal conditions.	Ongoing Current	FY 1995 - FY 1999		South Florida counties	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 1.0/acre); Total cost dependent upon number of acres restored. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-h2.2	Implement management plans for sites including P. robinii and modify as necessary for the species.	Ongoing Current	FY 2009		Florida Department of Environmental Protection, South Florida counties	Management: General	Labor type not yet selected	Cost dependent upon type of plan implemented. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	1	piro-h2.3	Continue to refine management practices for P. robinii and its habitat.	Partially Complete	FY 2007		Non-governmental organizations	Management: General	Labor type not yet selected	Action lead(s): FWS

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Key tree cactus (Pilosocereus robinii)	2	piro-h3.1	Assess important characteristics of P. robinii habitat.	Complete	FY 2007	FY 2011	Florida Department of Environmental Protection, South Florida counties	Research: Habitat Requirements	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	2	piro-h3.2.1	Assess the available GIS data.	Complete	FY 2005	FY 2007	Florida Department of Environmental Protection, Fairchild Tropical Garden, Institute for Regional Conservation	Management: General	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-h3.2.2	Create and distribute coverages of population locations.	Ongoing Current	FY 2005		Non-governmental organizations	Management: General	Labor type not yet selected	Initiated by FWS in 2004. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-h3.2.3	Acquire recent imageries of the sites.	Ongoing Current	FY 2007		Florida Department of Environmental Protection	Management: General	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-h3.3.1	Evaluate patterns of habitat response to hurricanes and the implications on P. robinii populations.	Partially Complete	FY 2007		Florida Department of Environmental Protection, Public and private universities	Research: Habitat Requirements	Labor type not yet selected	The Big Pine Key population was affected by hurricane Georges in 1998. Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	3	piro-h3.3.2	Investigate the relationships of exotic vegetation.	Obsolete			Florida Department of Environmental Protection, Public and private universities	Work type not yet selected	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	3	piro-h3.4.1	Investigate the historic distribution.	Complete	FY 2010	FY 2011	Florida Department of Environmental Protection, South Florida counties	Research: General	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-h3.4.2	Determine minimum habitat area required for a stable or increasing population.	Not Started			Florida Department of Environmental Protection, South Florida counties	Research: Demographic Studies	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	2	piro-h3.4.3	Determine the amount and configuration of habitat necessary to support a stable or increasing population of P. robinii.	Not Started			Florida Department of Environmental Protection, South Florida counties	Research: Habitat Requirements	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	2	piro-h4.0	Monitor the status of P. robinii habitat.	Ongoing Current	FY 2007		Non-governmental organizations	Research: Habitat Status	Labor type not yet selected	Action lead(s): FWS

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Key tree cactus (Pilosocereus robinii)	3	piro-h5.0	Increase public awareness of P. robinii habitat and instill stewardship.	Not Started			Florida Department of Environmental Protection, South Florida counties	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	1	piro-s1.1	Inventory known populations.	Ongoing Current	FY 2006		Florida Department of Environmental Protection, Non-governmental organizations, Florida Natural Areas Inventory, Florida Department of Agriculture and Consumer Services	Research: Population Surveys	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-s1.2	Search for populations of P. robinii. Resurvey historic locations.	Complete	FY 2000 - FY 2004	FY 2011	Florida Department of Environmental Protection, Non-governmental organizations	Research: Population Surveys	Labor type not yet selected	Initiated by FWS in 2004. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-s1.3	Map distribution of known populations and suitable habitat.	Ongoing Current	FY 2000 - FY 2004		Non-governmental organizations, Florida Natural Areas Inventory	Research: Population Surveys	Labor type not yet selected	Initiated by FWS in 2004. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	1	piro-s2.1	Minimize and eliminate disturbance or mortality to P. robinii.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, South Florida counties	Management: General	Labor type not yet selected	Task currently implemented on public lands and cost is included in responsible agency's budget. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-s2.2	Continue to enforce take prohibitions.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services	Management: General	Labor type not yet selected	Cost included in standard operating budgets of participating agencies. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	1	piro-s2.3.1	Maintain ex situ conservation collections of P. robinii.	Ongoing Current	FY 2007		Non-governmental organizations	Management: Propagation	Labor type not yet selected	Action lead(s): NGO
Key tree cactus (Pilosocereus robinii)	3	piro-s2.3.2	Study feasibility of translocating propagules into historically appropriate and protected natural habitats.	Partially Complete	FY 2007		Non-governmental organizations	Management: Propagation	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	3	piro-s2.3.3	Identify potential reintroduction sites.	Ongoing Current	FY 2009		National Key Deer Refuge	Management: Reintroduction	Labor type not yet selected	Action lead(s): Fairchild Botanical Garden

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Key tree cactus (Pilosocereus robinii)	3	piro-s2.3.4	Use reintroduction protocols established by the conservation community.	Not Started			Florida Department of Environmental Protection, Florida Natural Areas Inventory, Private industry, landowners, etc., Public and private universities	Management: Reintroduction	Labor type not yet selected	Task dependent upon use of protocols by participating agency's. Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-s2.3.5	Monitor the experimental outplantings.	Not Started			Non-governmental organizations	Research: Reintroduction	Labor type not yet selected	Action lead(s): NGO
Key tree cactus (Pilosocereus robinii)	2	piro-s3.1	Study the reproductive biology of P. robinii.	Partially Complete	FY 2007		Non-governmental organizations	Research: Other Information	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	2	piro-s3.2	Conduct genetic studies to document genetic variation within and between populations.	Not Started			Private industry, landowners, etc., Public and private universities	Research: Genetics	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	2	piro-s3.3	Determine population size and viability of all populations.	Partially Complete	FY 2007		Non-governmental organizations	Research: Population Surveys	Labor type not yet selected	Action lead(s): universities
Key tree cactus (Pilosocereus robinii)	1	piro-s3.4	Study the response of P. robinii to habitat management treatments.	Partially Complete	FY 2007		Florida Department of Environmental Protection, South Florida counties	Research: Habitat Requirements	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-s3.5	Characterize the habitat and identify suitable sites for experimental outplantings.	Ongoing Current	FY 2009	FY 2011	Florida Department of Environmental Protection, South Florida counties	Research: Reintroduction	Labor type not yet selected	Action lead(s): Fairchild Botanical Garden
Key tree cactus (Pilosocereus robinii)	1	piro-s4.1	Conduct long-term monitoring of the status of P. robinii.	Ongoing Current	FY 2006		Florida Department of Environmental Protection, Non-governmental organizations	Research: Population Surveys	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	2	piro-s4.2	Monitor the status of known pollinators.	Not Started			Florida Department of Environmental Protection, South Florida counties	Research: Demographic Studies	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-s4.3	Collect and archive existing and historical data.	Partially Complete	FY 2006		South Florida counties	Management: General	Labor type not yet selected	Action lead(s): FWS
Key tree cactus (Pilosocereus robinii)	3	piro-s5.1	Prepare informational material for the general public.	Not Started			Non-governmental organizations	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS

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Key tree cactus (Pilosocereus robinii)	3	piro-s5.2	Inform Federal and State personnel regarding the presence of P. robinii.	Complete	FY 1995 - FY 1999	FY 2011	Florida Department of Environmental Protection, South Florida counties	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS